UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/596,924	06/19/2000	THOMAS A. BERSON	XER1P012	4488

7590   10/18/2005

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EXAMINER
MOORTHY, ARAVIND K

ART UNIT	PAPER NUMBER
2131	

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<table>
<tr>
<td rowspan="2" style="vertical-align: top;">Office Action Summary</td>
<td colspan="2">Application No.

09/596,924</td>
<td colspan="2">Applicant(s)

BERSON ET AL.</td>
</tr>
<tr>
<td colspan="2">Examiner

Aravind K. Moorthy</td>
<td>Art Unit

2131</td>
<td></td>
</tr>
</table>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _25 July 2005_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-21_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-21_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _24 November 2003_ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1. This is in response to the Appeal Brief filed on 25 July 2005.

2. Claims 1-21 are pending in the application.

3. Claims 1-21 have been rejected.

4. Claims 22-24 have been cancelled.

Response to Amendment

5. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Objections

6. Claim 8 is objected to because of the following informalities: misspelling. The applicant has misspelled the word "computer" as "compute" in the preamble of the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 2, 4, 5, 8, 9, 11, 12, 15, 16, 18 and 19 are rejected under 35 U.S.C. 102(e)

as being anticipated by Sibert U.S. Patent No. 6,832,316 B1.

As to claim 1, Sibert discloses a method for pricing a cryptographic service,

comprising:

> (a) receiving a request for a cryptographic service [column 5, lines

25-37];

> (b) identifying a computational burden required to perform the

cryptographic service, including one or more of a privacy level of the

cryptographic service or a speed of performing the cryptographic service

[column 9, lines 50-63]; and

> (c) determining a price of the cryptographic service based on at

least one of computational burden, privacy level, and speed [column 9,

lines 50-63].

As to claims 2, 9, and 16, Sibert discloses that a user requesting the cryptographic

service specifies the privacy level [column 4, lines 41-67].

As to claims 4, 11 and 18, Sibert suggests requesting payment for the

cryptographic service from a user requesting the cryptographic service [column 9, lines

50-63].

As to claims 5, 12 and 19, Sibert discloses that the cryptographic service includes

utilizing private information retrieval [column 6, lines 5-15].

As to claim 8, Sibert discloses a computer program embodied on a computer readable medium for pricing a cryptographic service, comprising:

(a) a code segment that receives a request for a cryptographic service [column 5, lines 25-37];

(b) a code segment that identifies a computational burden required to perform the cryptographic service, including one or more of a privacy level of the cryptographic service or a speed of performing the cryptographic service [column 9, lines 50-63]; and

(c) a code segment that determines a price of the cryptographic service based on at least one of computational burden, privacy level, and speed [column 9, lines 50-63].

As to claim 15, Sibert discloses a system for pricing a cryptographic service, comprising:

(a) logic that receives a request for a cryptographic service [column 5, lines 25-37];

(b) logic that identifies a computational burden required to perform the cryptographic service, including one or more of a privacy level of the cryptographic service or a speed of performing the cryptographic service [column 9, lines 50-63]; and

(c) logic that determines a price of the cryptographic service based on at least one of computational burden, privacy level, and speed [[column 9, lines 50-63].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 3, 10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sibert U.S. Patent No. 6,832,316 B1 as applied to claims 1, 8 and 15 above, and further in view of Iwamura U.S. Patent No. 6,272,535 B1.

As to claims 3, 10 and 17, Sibert does not teach a user requesting the

cryptographic service specifies the speed of performing the cryptographic service.

Iwamura teaches that a user requesting the cryptographic service specifies the

privacy level and speed of performing the cryptographic service [column 15, lines 58-66].

Therefore, it would have been obvious to a person having ordinary skill in the art

at the time the invention was made to have modified Sibert so that the user requesting a

cryptographic service would have been able to specify the privacy level of the encryption.

It would have been obvious to a person having ordinary skill in the art at the time

the invention was made to have modified Sibert by the teaching of Iwamura because

different data needs a different level of privacy based on the sensitivity. So if the price of

encryption were dependent on the privacy level then a user with a low priority data would

want to pay less for a low level of privacy.

9. **Claims 6, 13 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sibert U.S. Patent No. 6,832,316 B1 as applied to claims 1, 8 and 15 above, and further in view of Billstrom U.S. Patent No. 5,729,537.**

As to claims 6, 13 and 20, Sibert does not teach that the cryptographic service includes utilizing group authentication.

Billstrom teaches that the cryptographic service includes utilizing group authentication [column 11, lines 22-43].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Sibert so that the cryptographic services included using group authentication.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Sibert by the teaching of Billstrom because group authentication provides anonymous access to the cryptographic service [column 5, lines 5-8].

10. **Claims 7, 14 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sibert U.S. Patent No. 6,832,316 B1 as applied to claims 1, 8 and 15 above, and further in view of Jakobsson U.S. Patent No. 6,049,613.**

As to claims 7, 14 and 21, Sibert does not teach that the cryptographic service includes utilizing mix networks.

Jakobsson teaches providing cryptographic services using mix networks [column 5, lines 7-29].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Sibert so that the cryptographic services were performed on a mix network.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Sibert by the teaching of Jakobsson because mix networks provide superior privacy, robustness, and efficiency [column 2, lines 58-60].
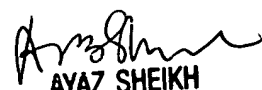
Conclusion

11.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aravind K. Moorthy whose telephone number is 571-272-3793. The examiner can normally be reached on Monday-Friday, 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.   Status information for published applications may be obtained from either Private PAIR or Public PAIR.   Status information for unpublished applications is available through Private PAIR only.   For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aravind K Moorthy
October 11, 2005

AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
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